

IN THE CLAIMS

Please amend the claims as indicated.

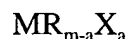
1.-29. CANCELLED

30. (Currently Amended) A process for producing a solid catalyst component for olefin polymerization, which comprises the step of contacting a solid catalyst component precursor (C) containing a magnesium atom, a titanium atom and a hydrocarbyloxy group, the hydrocarbyloxy group having 1 to 20 carbon atoms, with a halogeno compound (A) of the 13-or 14 group of elements in the periodic table of the elements, and an electron donor (B), the electron donor being selected from the group consisting of an organic acid esters, and an ethers, wherein the solid catalyst component precursor (C) is a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R^1 is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying $0 < a \leq 4$ with an organomagnesium compound (3) in the presence of an organosilicon compound (I) having an Si-O bond.

31. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 30, wherein the halogeno compound (A) is a compound represented by the following formula,



wherein M is an atom belonging to the 13 or 14 group of elements in the periodic table of the elements, R is a hydrocarbon group having 1 to 20 carbon atoms, X is the a halogen atom, m is a valence of M, and "a" is a number satisfying $0 < a \leq m$.

32. (Previously presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 30, wherein the halogeno compound (A) is a compound represented by the following formula,



wherein R is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying $0 < a \leq 4$.

33. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 30, wherein the electron donor (B) is an ether.

34. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 30, wherein the electron donor (B) is a dialkyl ester of a phthalic acid.

35. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 30, where said step of contacting comprises contacting a solid catalyst component precursor (C) being a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R^1 is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying $0 < a \leq 4$, with an organomagnesium compound (3) in the presence of an organosilicon compound (1) having an Si-O bond and a porous carrier (4) with the halogeno compound and electron donor.

36. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 30, wherein said step of contacting comprises contacting a solid catalyst component precursor (C) being a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R^1 is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying $0 < a \leq 4$, with an organomagnesium compound (3) in the presence of an organosilicon compound (1) having an Si-O bond and a porous carrier (4), wherein the porous carrier (4) is an organic porous polymer.

37. (Previously presented) A process for producing a catalyst for olefin polymerization, which comprises the steps of:

(i) contacting a solid catalyst component precursor (C) containing a magnesium atom, a titanium atom and a hydrocarbyloxy group, the hydrocarbyloxy group having 1 to 20 carbon atoms, with a halogeno compound (A) of the 13 or 14 group of elements in the periodic table of the elements, and an electron donor (B), the electron donor being selected from the group consisting of

an organic acid ester and an ether, wherein the solid catalyst component precursor (C) is a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R^1 is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying $0 < a \leq 4$, with an organomagnesium compound (3) in the presence of an organosilicon compound (I) having an Si-O bond, to obtain a solid catalyst component (I) for olefin polymerization; and

(ii) contacting the solid catalyst component (I) with an organoaluminum compound (II).

38. (Previously presented) A process for producing a solid catalyst component for olefin polymerization, which comprises the step of contacting an intermediate product with a compound (D) having a titanium-halogen bond, the intermediate product being obtained by contacting:

a solid catalyst component precursor (C) containing a magnesium atom, titanium atom and a hydrocarbyloxy group, the hydrocarbyloxy group having 1 to 20 carbon atoms, with a halogeno compound (A') of the 14-group of elements in the periodic table of the elements and an electron donor (B), the electron donor being selected from the group consisting of an organic acid ester and an ether, wherein the solid catalyst component precursor (C) is a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R¹ is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying 0<a≤4, with an organomagnesium compound (3) in the presence of an organosilicon compound (1) having an Si-O bond.

39. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 38, wherein the halogeno compound (A') is a compound represented by the following formula,



wherein M is an atom belonging to the 14-group of elements in the periodic table of the elements, R is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, m is a valence of M, and "a" is a number satisfying 0<a≤m.

40. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 38, wherein the halogeno compound (A') is a compound represented by the following formula,

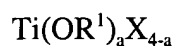


wherein R is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying 0<a≤4.

41. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 38, wherein the electron donor (B) is an organic acid ester or an ether.

42. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 38, wherein the electron donor (B) is a dialkyl ester of a phthalic acid.

43. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 38, wherein the solid catalyst component precursor (C) is a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R^1 is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying $0 < a \leq 4$, with an organomagnesium compound (3) in the presence of an organosilicon compound (1) having an Si-O bond and a porous carrier (4).

44. (Previously Presented) The process for producing a solid catalyst component for olefin polymerization according to Claim 43, wherein the porous carrier (4) is an organic porous polymer.

45. (Previously presented) A process for producing a catalyst for olefin polymerization, which comprises the steps of:

(i) contacting an intermediate product with a compound (D) having a titanium-halogen bond, the intermediate product being obtained by contacting a solid catalyst component precursor (C) containing a magnesium atom, titanium atom and a hydrocarbyloxy group, the hydrocarbyloxy

group having 1 to 20 carbon atoms, with a halogeno compound (A') of the 14 group of elements in the periodic table of the elements and an electron donor (B), the electron donor being selected from the group consisting of an organic acid ester, and an ether,, wherein the solid catalyst component precursor (C) is a trivalent titanium atom-containing solid product obtained by reducing a titanium compound (2) represented by the following formula,



wherein R¹ is a hydrocarbon group having 1 to 20 carbon atoms, X is a halogen atom, and "a" is a number satisfying 0<a≤4, with an organomagnesium compound (3) in the presence of an organosilicon compound (I) having an Si-O bond, to obtain a solid catalyst component (I') for olefin polymerization; and

(ii) contacting the solid catalyst component (I') with an organoaluminum compound (II).